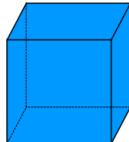
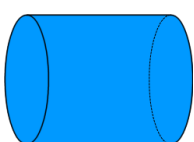


Minimum Surface Area

Cylinder p. 462
Rectangular Prism p. 470

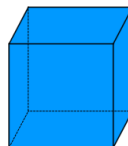
Students will identify the minimum surface Area formulas used for optimal cylinders and cubes.

Identify the relationship for optimal cylinders and cubes.
Recall Volume



May 28-10:55 AM

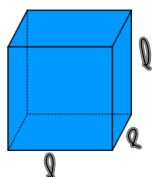
Create Formula Optimal Rectangular Prism
Use Eqao sheet for a rectangular prism



SA =

May 28-11:56 AM

Create Formula Optimal Rectangular Prism
Use Eqao sheet for a rectangular prism

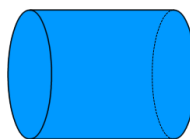


$$SA = 2(wh + lw + lh)$$

$$= 6(l^2)$$

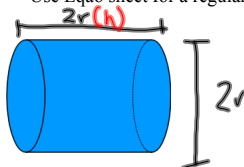
May 28-11:56 AM

Create Formula Optimal Cylinder
Use Eqao sheet for a regular cylinder



May 28-11:54 AM

Create Formula Optimal Cylinder
Use Eqao sheet for a regular cylinder



$$SA = 2\pi r^2 + 2\pi rh$$

$$SA = 2\pi r^2 + 2\pi r(2r)$$

$$SA = 2\pi r^2 + 4\pi r^2$$

$$SA = 6\pi r^2$$

May 28-11:54 AM

Seatwork

p. 463-466

q. 11, 12, 14 & 17

p. p. 473-474

q. 9, 11, 13 & 17

May 28-11:57 AM

p463 q12 a) 1884 cm^2

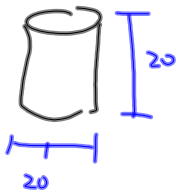
$$SA = 6\pi r^2$$

$$\frac{1884}{6\pi} = \frac{6\pi r^2}{6\pi}$$

$$\frac{1884}{6(3.14)} = r^2$$

$$\frac{1884}{18.84} = r^2$$

$$\sqrt{100} = \sqrt{r^2}$$

$$10 = r$$


May 28-1:33 PM

p473

q11

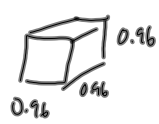
$55 \text{ m}^2 \rightarrow \text{cube}$

Optimal Surface Area

$$SA = 6l^2$$

$$55 = 6l^2$$

$$\frac{55}{6} = \frac{6l^2}{6}$$

$$9.166\bar{6} = l^2$$


$0.96 = l$

Optimal Volume

$$V = l^3$$

$$V = (0.96)^3$$

$$V = 0.884736 \text{ m}^3$$

May 28-1:39 PM